Your response

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Question 1: For future outdoor use of 26 GHz, do you agree that the proposed exclusion zones will provide appropriate protection to the 6 radio astronomy sites? If not please explain your reasons for this providing any supporting evidence.	Confidential? – Y / N No response provided.
Question 2: For indoor use of 26 GHz, do you agree that additional measures are not needed to protect radio astronomy sites and that we should remove the existing 1 km exclusion zone around Jodrell Bank and Cambridge from the current 26 GHz indoor-only shared access licence product? If not, please explain your reasons for this providing any supporting evidence.	Confidential? – Y / N No response provided.
Question 3: Do you agree with our proposal to limit the number of 26 GHz base stations in 24.25-25.05 GHz to	Confidential? – No ESA and EUMETSAT have seen and fully support the comments provided by the UKSA, UK Met Office and ECMWF.

protect EESS (passive) use at 24 GHz? If not, please explain your reasons for this providing detailed supporting evidence.	In addition to the elements provided in those comments, EUMETSAT and ESA would like to reiterate that the 23.6-24.0 GHz band offers unique insights into the water vapour contained in the atmosphere. Those insights are afforded by immutable physical properties, and it is not feasible to make the same measurements elsewhere in the frequency spectrum. Observations in the 23.6-24 GHz are an indispensable element in today's measurements of the atmosphere from space for daily weather forecasting and climate monitoring. ESA and EUMETSAT would also like to highlight that, together, these two organisations develop and operate for its member states, including the UK, several satellite missions that operate or plan to operate passive microwave sensors within the 23.6-24.0 GHz band. These sensors and missions are the following: - AMSU on METOP - MWS and MWI on METOP-SG - MWR on SENTINEL-3 - AMR-C on SENTINEL-6 The missions listed above are part of either the weather satellite programmes (EPS, EPS-SG and JPS) or of the COPERNICUS programme. These missions will operate well into the 2040's and, given the uniqueness of the 23.6-24.0 GHz band, more and successor missions and will operate in the same frequency band even beyond that to provide long term weather and climate data continuity. It is also worth noting that Europe is taking a leading role globally in providing weather and climate data through these satellite missions and instruments which would be jeopardised by insufficient regulations to protect these European assets. Insufficient protection of these measurements would result in a set-back in the forecast skills with all negative consequences to society and economy. Their impact is described for example in the following references: - Meteorology: https://library.wmo.int/doc_num.php?explnum_id=6484 - COPERNICUS: https://www.copernicus.eu/sites/default/files/2018-10/Copernicus_Report_Downstream_Sector_October_2016_0.pdf. Therefore, ESA and EUMETSAT would like to stress that interference to those passive microwave sensors in the 23.6-24.0 GHz would have a detrimental impact on the data that ESA and EUMETSAT is tasked (by its member states) to provide to its

	users/partners (like UKSA, UK Met Office and ECMWF) and thus would ultimately lead to significant negative consequences to the European and global society and economy.
Question 4: Do you agree with the technical analysis set out in Annex 2? If not, please explain your reasons for this providing detailed supporting evidence.	Confidential? – No ESA and EUMETSAT have seen and fully support the comments provided by the UKSA, UK Met Office and ECMWF.